



# APM CO., LTD

## ALINE-8110 PRO-8110



ALINE-8110 & PRO-8110 WiFi Mesh Metropolitan Area Network solution extends the capability of WiFi Local Area Network technologies (IEEE802.11) from providing just local area network connectivity to a wider reach for “wide-area” coverage without messy wiring and wired backbone connection.

ALINE-8110 & PRO-8110 WiFi Mesh Metropolitan Area Network is designed for Enterprises as well as Residential (End-User) to have wireless broadband connectivity, with security, management and mobility taking into consideration.

Our WiFi Wireless Mesh Network solution addresses the market requirements for networks that are highly scalable and self configurable, offering end users secure, seamless roaming beyond traditional WLAN boundaries and provides easy deployment in areas that do not (or cannot) support a wired backhaul. ALINE-8110 & PRO-8110 solution is well-suited for providing broadband wireless access in areas that traditional WLAN systems are unable to cover.

The fundamental Network architecture of ALINE-8110 & PRO-8110 is given in Figure-1, and is built upon our Dual-Radio Access Point (ALINE-8110 & PRO-8110 NodeAP), where one of the Radios serve as the backbone network infrastructure for Internet routing protocol, and the 2nd Radio form the end-user up/down stream wireless link.

ALINE-8110 & PRO-8110 solution includes point-to-point and point-to-multipoint architecture with either normal (100mW) and/or extended (400mW) RF output transmission with external Antenna. With integration of routers, security features & adaptive backhaul routing algorithm & mobile IP for providing both Internet Access and WiFi VoIP applications.

### Key Features

#### ◆ Internet & Access

- Compliance with IEEE802.11b/g/a standard with 100mW or 400mW transmission
- DHCP Server/Client, DNS Router, SNMP, VPN, NTP and Remote Syslog
- Customizable Firewall, WEP, WPA, Zero-Configuration with Adaptive DNS
- HTTP/HTTPS Secured Login, PPPoE and Access Control List Support.



# APM CO., LTD

## ◆ Service & Management

Support SNMP V1,2,3 and Integrated with ALink-8110 Network Management Suite

Support up to 250 users simultaneously with both LAN and WLAN interface

## ◆ Advanced

Mobile IP (with Mobile Location Register Server), IAPP, VPN Server,

Built-in with QoS and traffic shaping mechanism for channel traffic control for individual user,

and applications, and Compliance with iPass International Roaming

Service Priority Optimal Link State Routing (MDOLSR) Protocol

Specification		
Hardware		Intel® IXP425 highly integrated & versatile single-chip network processor
WLAN	Standard	IEEE802.11b/g (AP) or IEEE802.11a/b/g/ (Backhaul)
	Frequency Channels Support (AP Mode)	Depending on Countries Channel assignment IEEE 802.11b/g America/ Canada: 11 channels Europe: 13 channels Japan: 14 channels France: 4 channels
	Range Access (AP)	0-2Km
	Frequency Support (Backhaul)	Depending on Countries Channel assignment IEEE 802.11b/g (2.4GHz) IEEE 802.11a (5.0GHz)
	Range Access (Backhaul)	0-2Km
	Date Rate	11Mbps, 54Mbps with Dynamic fallback
	Antenna	12dBi Omni or Directional Antenna
Protocol		IP, NAT, DHCP, NTP, PPPoE, DNS
Security		WEP, AES, IEEE802.1x, WPA1/2, Firewall & VPN (PPTP, L2TP & X.509)
Authentication		HTTP/ HTTPS Login with SSL Encryption, 802.1x and AAA RADIUS
Services		Zero-Configuration, Proxy bypass, DNS feed through, Mobile IP, IAPP, QoS and 200kB Internal Web Space, Free Web serving for "Specific Area"
Management		NMS, Local/Centralize Webbase Configuration, SNMP V1/2/3, AP Discovery, Remote Syslog and Remote Firmware Upgrades
Ports	WAN	1*10/100 BaseT, Auto-Negotiation
	LAN	1*10/100 BaseT, Auto-Negotiation
LED Indicators		Power, LAN, WAN & WLAN
Temperature Range		-30 ~ +70°C (Operating), -40~80°C (Storing)
Humidity		Max. 95% Non-condensing

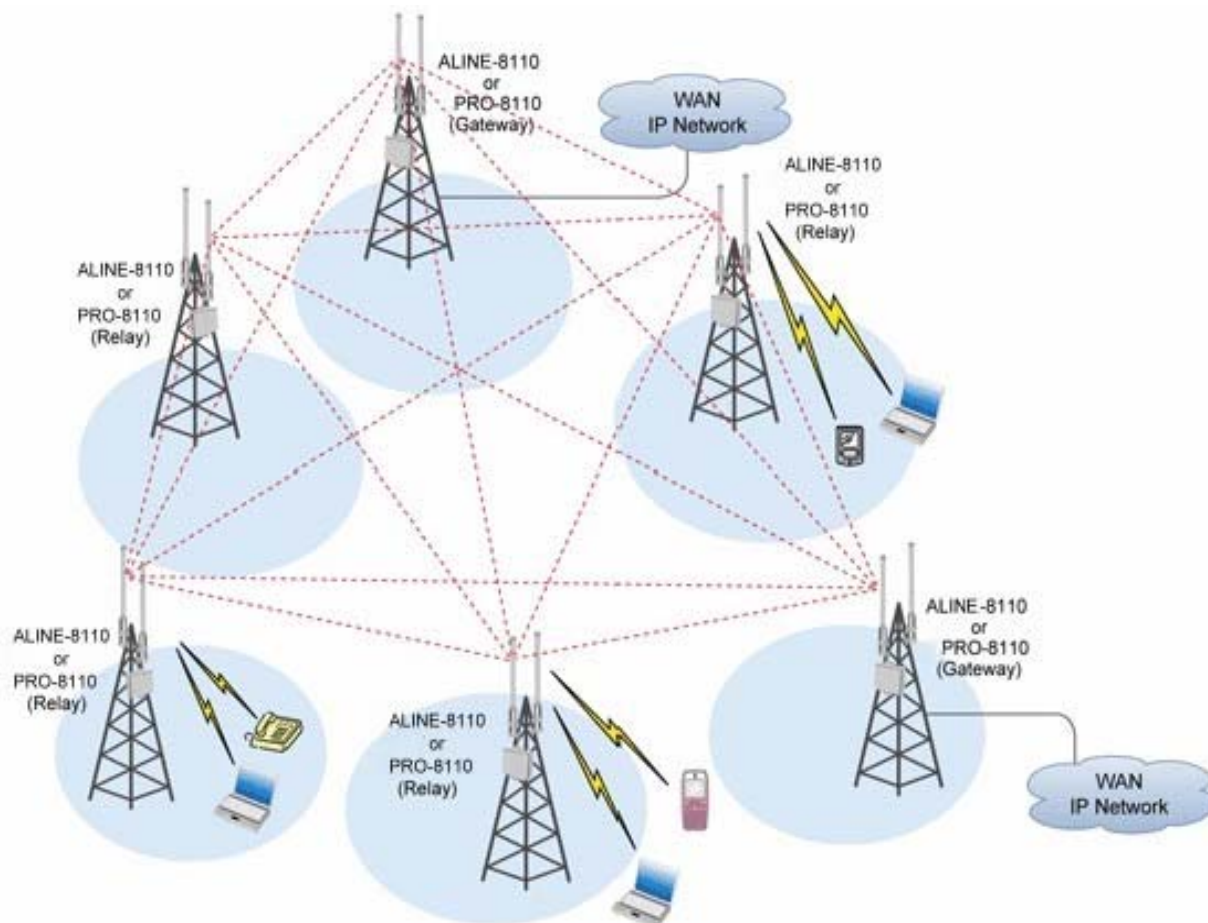


# APM CO., LTD

Ordering Information	
ALINE-8110	Outdoor Mesh Gateway AP, 2*RF(802.11a/b/g), PoE
PRO-8110	
ALINE-8110R	Outdoor Mesh Relay AP, 2*RF(802.11a/b/g), PoE
PRO-8110R	

## Application

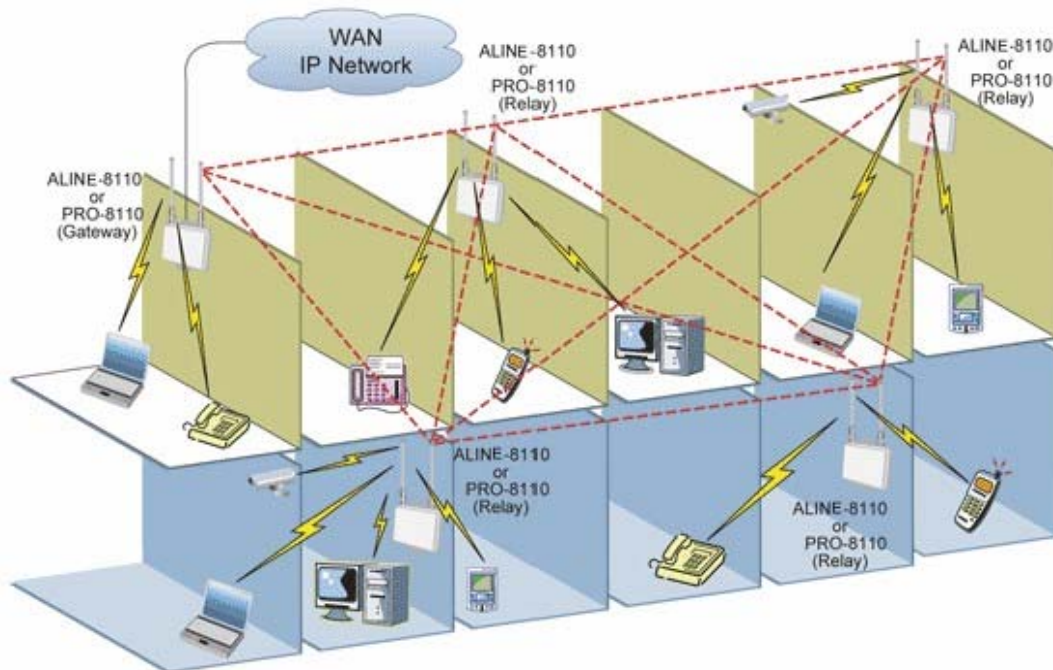
- ALINE-8110 & PRO-8110 Outdoor WiFi Mesh Metropolitan Network can be deployed for
- Intern Building Connection WiFi Network
- University Campus Network
- Hospital Network
- Security Monitoring Network
- WiFi City & WiFi Township
- Localized Intra Network restricted zone
- Wireless Local Loop for VoIP and Data Communication



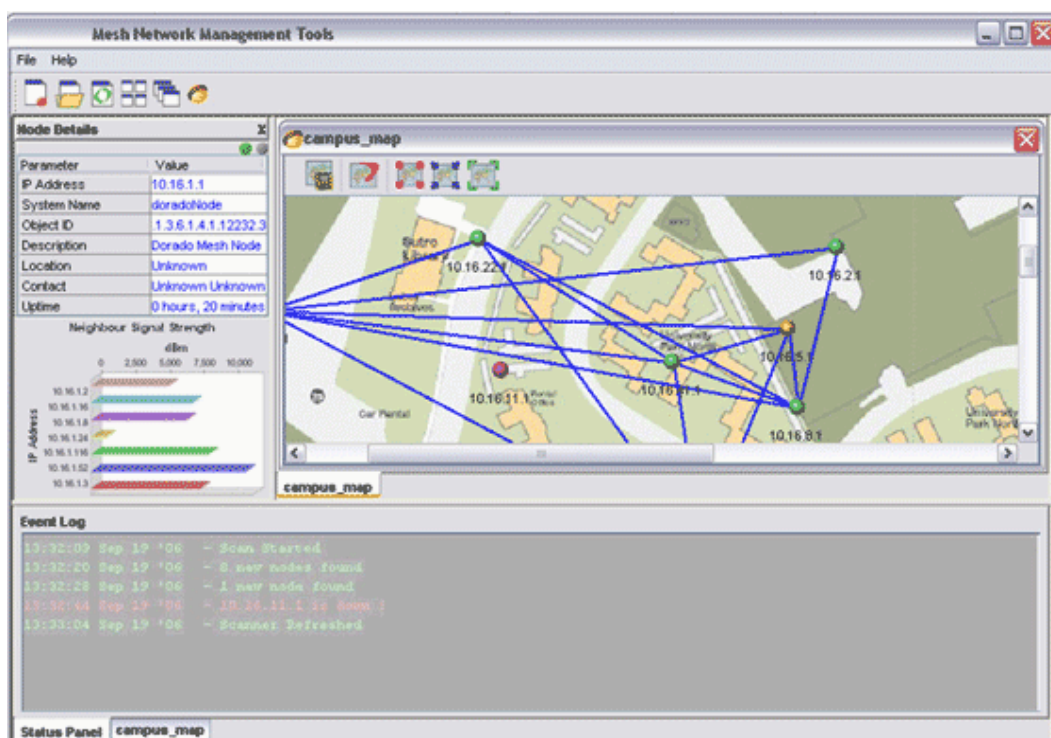


# APM CO., LTD

## Example of ALINE-8110 & PRO-8110 WiFi Indoor Mesh Network Deployment Scenario and Applications



## Example of ALINE-8110 & PRO-8110 Network Management Suite







# APM CO., LTD

Standard Accessories		
		
25M Cable	1.5M Cable	2M Cable
		
Bracket Kit (For ALINE-8110)	Bracket Kit *2(For PRO-8110)	2.4G & 5G Ant
		
Power over Ethernet		Tape